

PETROLEUM HELICOPTERS, INC.

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Mr. Joshi:

We feel that it is not in the public interest to automatically include rotorcraft rotor blade damage as "substantial damage", thus classifying those events as accidents. The following arguments are provided to support this position:

 The NTSB is unlikely to do a field investigation of ground rotor blade strikes even if they are redefined as an "accident", unless other damage or injury occurs.

The NPRM Preamble states:

This amendment is intended to enhance aviation safety by providing the NTSB direct notification of these events so that we can investigate and take corrective actions in a timely manner.

This Preamble implies that the NTSB would actually go to the accident or incident site and investigate ground rotor blade strikes in which no other damage or injury occurs. Ten years (1995 through 2004) of U.S. Registered helicopters accidents from the NTSB accident reports on their Internet website were analyzed by a major aircraft manufacturer. This information shows that, of the 1,862 accidents that occurred during this period, the NTSB only conducted on site field investigations in 329 cases. This is not a critique of the Safety Board, just a reality check of available resources.

NTSB Field vs. Limited Investigations

The NTSB does not even go to the field on all fatal helicopter accidents, thus 26.5% of all fatal accidents were only limited investigations. This study shows that the NTSB was not able to make a thorough field investigation in 82.3% of ALL helicopter accidents of which they are presently being notified.

The proposed change to make ALL rotor blade ground strikes with no other components damage or injury, to be now classified as "accidents", would just add to the "No Injury Accidents" group of which the NTSB only goes to the field on 39 of them in 10 years. Said differently, 95.9% of all No Injury Accidents were not field investigated by the NTSB before the proposed change to add in ground rotor blade strike as accidents.

It is highly likely that many fatal helicopter accidents will not get an NTSB led field investigation. NTSB field investigations of all fatal helicopter accidents should be a priority and not be diluted by added minor, non injury incidents.

2. Costs versus Benefit

Executive Order 12866 entitled "Economic Analysis of Federal Regulations states in its Introduction:

"In accordance with the regulatory philosophy and principles provided in Sections 1(a) and (b) and Section 6(a)(3)(C) of Executive Order 12866, an Economic Analysis (EA) of proposed or existing regulations should inform decisionmakers of the consequences of alternative actions. In particular, the EA should provide information allowing decisionmakers to determine that: There is adequate information indicating the need for and consequences of the proposed action; The potential benefits to society justify the potential costs, recognizing that not all benefits and costs can be described in monetary or even in quantitative terms, unless a statute requires another regulatory approach; The proposed action will maximize net benefits to society (including potential economic, environmental, public health and safety, and other advantages; distributional impacts; and equity), unless a statute requires another regulatory approach;"

It further states:

"The "Regulatory Flexibility Act" (P.L. 96-354) requires Federal agencies to give special consideration to the impact of regulation on small businesses. The Act specifies that a regulatory flexibility analysis must be prepared if a screening analysis indicates that a regulation will have a significant impact on a substantial number of small entities."

The FAA provides Cost-Benefit Studies when they propose federal rule changes, which is consistent with this Executive Order. The cost-benefit study provides the cost of implementing the proposed change, which is typically borne by the pilot, operator, or manufacturer. The societal benefits gained by the proposed change must be greater than the cost to society, to allow implementation of the regulation change. It is not known if the NTSB (a federal agency) is required to do a cost-benefit study of their proposed rule change (e.g. this NPRM). If a cost-benefit study of the effects of this NPRM had been done, it would have been apparent that there is little actual benefit and large costs associated with the rule change of reclassifying ground rotor blade strikes as "accidents". The following is a preliminary cost-benefit study related to the rotor blade ground strikes classification change from an incident to an accident.

Cost to the Operator

When an operator sells a helicopter, an inflated accident history (including ground rotor blade strikes with no other damage) will decrease the value of his aircraft. A large cost to

the operator is incurred when the ground rotor blade strike (no other damage) occurs. This "accident" requires immediate notification to the NTSB exactly like reporting a fatal accident. The helicopter must be left exactly where it is at the time of the ground rotor blade strike and security maintained at that "accident" site until the NTSB arrives, does their field investigation, and releases the "accident aircraft" back to the operator. The few days that the NTSB keeps the "accident aircraft" out of service while it does its field investigation, cost the operator (e.g. lost revenue).

Cost to the Manufacturer

The safety record (e.g. accident rate) of a manufacturer's model helicopter is very important to him and to potential customers. Inflated accident rates (due to ground rotor blade strikes being called accidents), is detrimental to a manufacture in today's competitive market in the US and abroad. If manufacturers petition a reclassification for each ground rotor blade strike "accident" back to the proper "incident" classification, the cost to the manufacturer and to the NTSB staff will increase.

The helicopter manufacturer accident investigator will spend valuable time supporting the NTSB field accident investigation on each of these ground rotor blade strike "accidents". That time by both the NTSB and manufacturer accident investigator could be spent more productively, on investigating more fatal accidents.

Cost to the Pilot

The pilot has a personal interest in his safety record as it affects his employment. Additional rotor blade ground strike "accidents" are counted the same as "real accidents" so his safety record appears worse. This poor safety record is serious to a pilot trying to get a job. It is not known if he will report these ground rotor blade strikes (with no other damage or injury) or not. It is possible that he might just change out the rotor blade per the maintenance manual without reporting the "accident".

Benefit to Society

It is difficult to find any benefit of changing ground rotor blade strikes (no other damage) to be called "accidents". There is no benefit to the pilot. There is no benefit to the operator. There is no benefit to the helicopter industry. There is no benefit to the helicopter manufacturer. Every helicopter manufacturer has very distinct maintenance instructions in the event the helicopter strike something (ground or in the air). It is typically called a sudden-stoppage inspection and calls out specific inspections. If the blade passes the inspection or can be repaired per the manual, the blades can be reinstalled. If that sudden stoppage damage extends into the drive train, the drive train damage falls within "substantial damage" and the event is properly classified as an accident anyway.

3. Safety Impact

An unintended consequence of this proposed rule would be to discourage certain emergency procedures training. Flight schools and operator training programs typically include full touchdown autorotations, hydraulic failures, and other procedures which occasionally result in "minor" damage to tail and main rotor blades. If these incidents become accidents, this type of training will be greatly reduced or eliminated. Loss of this vital aspect of training is a detriment to safety.

Alternate Approaches

Executive Order also requires federal agencies to investigate alternate approaches. In regard to the "accident" classification of ground rotor blade strikes events being used to ensure "direct NTSB notification" (re preamble), the real issue should be the notification, not the classification. Notification of "incidents" is already required by 830.5(a) and this NPRM is adding additional specific "incidents" to be reported. The proper place to require reporting of ground rotor blade strikes (with no other damage or injury) is as an "incident" under 830.5(a). This would provide the NTSB desired reporting without all of the penalties of being called an "accident".

We also recommend that written, publicly available, guidance material (similar to FAA Order 8400.10) be written to standardize what is considered substantial damage as it relates to aircraft incidents or accidents. It could be based on a percentage value of the aircraft, when other injury or third party damage is not present.

4. Vague Definition

Ground Strike is too vague for this "special accident". It is assumed that this would include a rotor blade striking anything on the ground, attached to the ground like a pole/wire, oil/gas platform, heliport, helidecks, railing, top or side of a building, a fence, tree, bush, rock, snow, or any terrain feature except water. It could include striking another aircraft as long as one of them was on the ground, stationary or taxiing. It obviously does not include Foreign Object Debris (FOD) in flight from the helicopter itself or midair collision with birds or other flying objects. A nick or scratch beyond the maintenance manual limits will require either repair or replacement. If the blade is removed for strike damage and is repaired, it can go back on a helicopter for the remainder of it's useful life — why is this an accident? This deletion of "rotor blade" from the ground strike exemption of the substantial damage definition does not make sense and will cause many requests for reclassification back to an incident.

5. Summary

The proposed change in 830.2 to eliminate ground rotor strikes from the exemption portion of the definition of "substantial damage" is not appropriate, and is strongly opposed. These incidents are being reported to the NTSB now and no field investigations are occurring. The NTSB only goes to the accident site on 17.7% of all U.S. Registered

helicopter accidents under the present definition thus it is extremely unlikely the NTSB will actually do a field investigation of these new ground rotor blade strike accidents. This proposed regulatory change would increase the number of "accidents" and increase costs to the operators with no significant safety gain.

6. Recommendations

We recommend that there be NO change to the 14 CFR 830.2 definition of "substantial damage".

If the NTSB feels it must have more regulatory reporting, it is recommended that ground rotor blade strikes be reported as "incidents" under 830.5(a) by adding a new incident paragraph (11) as is done with NPRM adding paragraphs (8), (9), and (10). Such a paragraph could read: "(11) a main or tail rotor blade ground strike."

If other damage or injury occurs, the current regulatory language is sufficient to properly classify those occurrences.

Sincerely

Michael C. Hurst

Chief Pilot

Petroleum Helicopters, Inc.